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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,968	06/21/2000	Roberto Aiello	FANT-00-013	7156

44279 7590 01/19/2005

PULSE-LINK, INC.  
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EXAMINER
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PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/599,968

Applicant(s)

AIELLO ET AL.

☒

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,7 and 10-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,10-14,20 is/are rejected.
- 7) ☒ Claim(s) 15-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed on 9/21/04.

#### ***Double Patenting***

2. Claims 14 and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 09/949,256. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-9 of copending Application No. 09/949,256 encompass all limitations recited in claims 14 and 20 of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 14 and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 51-89 of copending Application No. 09/393,126. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 51-89 of copending Application No. 09/393,126 encompass all limitations recited in claims 14 and 20 of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 7, 10, 11, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "The receiver of claim 6". This limitation is lack of antecedent basis since claim 6 is a canceled claim.

Claim 10 and 12 are rejected with similar reasons set forth for claim 7.

Claims (if any, dependent on above claims) are therefore also rejected.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 7 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fullerton et al, (5,677,927), previously cited.

-As per claims 1 and 5, see figures 14, 18, 19, 24, and col. 16, line 39 to col. 18, line 7, col. 18, line 62 to col. 19, line 31, col. 24, line 17 to col. 25, line 64, Fullerton et al discloses a system includes a receiver (see figure 14) wherein the receiver comprises:

rf front end means (1402);

detector means (1408) for detecting a received signal, being transmitted from a transmit site; and

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data recovery means (1424, 1410, 1418, 1414, 1428) for receiving spread spectrum rf modulated signals having different modulation methods and/or having different pulse repetition frequencies (see also figures 10, 18, 19, 24, and col. 14, lines 44-67 and col. 15, lines 1-24).

Fullerton et al does not disclose said received spread spectrum rf modulated signals modulated by on-off keying and pulse amplitude modulation (as claimed in claim 1), or said received spread spectrum rf modulated signals having different pulse repetition frequencies and modulated by pulse amplitude modulation (as claimed in claim 5).

However, Fullerton et al teaches that said received spread spectrum rf modulated signals when still at the transmit site, they can be configured to be a combinations (1024) of plural modulated signals, modulated by PM, AM, PM, FSK, PSK, pulse FM, or the like and/or digital encoded signals, encoded, e.g., by Manchester encoding, being as electrical representatives of plural information (1020) from an information source (1018) to be transmitted.

Regarding to claim 1, while it is well-recognized in the art that on-off keying (e.g., ASK, PSK, FSK, or unipolar encoding) and pulse amplitude modulation are ones or the like of PM, AM, PM, FSK, PSK, pulse FM or Manchester encoding for modulating an information source to form its electrical representative to be transmitted, and the examiner takes Official Notice, therefore, it would have been obvious for one skilled in the art, within his skills and upon design preference or system requirement, to implement Fullerton et al in such a way that said spread spectrum rf modulated signals would be configured as a combined signals modulated by on-off keying and pulse amplitude modulation, as also taught by Fullerton et al, so that capability of channelization of system would be enhanced.

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Regarding to claim 5, similar to the above discussion for claim 1, it would have been obvious for one skilled in the art, within his skills and upon design preference or system requirement, to implement Fullerton et al in such a way that said spread spectrum rf modulated signals would be configured as a combined signals having different pulse repetition frequencies and modulated by pulse amplitude modulation, as also taught by Fullerton et al, so that capability of channelization of system would be enhanced.

-As per claim 7, as applied for claim 1, in Fullerton et al, said data recovery means can be configured to receive signals modulated by on-off keying.

-As per claim 10, Fullerton et al discloses at least a loop module (1429) to detect changes in a pulse sampling rate (see figure 14, and col. 17, lines 44-49).

-As per claims 11 and 12, Fullerton et al discloses a module ((1902) or (2418)) (see figures 19 and 24) for determining when to sample an incoming signal to generate digital output signals.

-As per claim 13, Fullerton et al discloses a decoder ((1904) or (2452)) as claimed (see figures 19 and 24).

#### ***Allowable Subject Matter***

8. Claims 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

9. Applicant's arguments filed on 9/21/04 have been fully considered but they are not in-part persuasive.

-Regarding to the previous rejection, under Double Patenting, to claims 14 and 20, since the applicant did not respond to this rejection, it is repeated above in this Office Action.

-The previous rejection, under 35 USC 102, to claims 1-13, as being disclosed by Gilhousen, is now withdrawn since the claims are amended to overcome the rejection.

-The applicant's argument with respect to the rejection, under 35 USC 103, to claims 14-20, as being disclosed by Fullerton et al, in view of Gilhousen, is render moot. The rejection is now withdrawn.

-The applicant's argument with respect to the rejection, under 35 USC 102, to claims 1, 5, 7 and 10-13, as being disclosed by Fullerton et al, has been considered, but moot in view of the new ground(s) of rejection as set forth above in this Office Action.

### *Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

Phuong Phu  
01/14/05

**PHUONG PHU**  
**PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631